IN THE CLAIMS:

1-56. (Previously cancelled)

57-63. (Cancelled)

64. (Amended) A microstructure device for detecting one or more analytes produced in a plurality of assays, the microstructure device comprising (i) a flexible elongate laminate having a plurality of microstructures arranged therein, the flexible elongate laminate comprising a first lamina having a first surface, a second lamina having a second surface, and a flexible circuit laminate adjacent to the first lamina, wherein at least one of the first or second lamina has a plurality of openings so that whenever the first surface of the first lamina apposes the second surface of the second lamina each opening of the plurality of openings is in fluid communication with one of said plurality of microstructures, and wherein the flexible circuit laminate comprises a plurality of electrodes, each electrode being in contact with an electroflow medium whenever the electroflow medium is supplied to said microstructures, each of said microstructures comprising:

a sample supply reservoir at an opening;

a sample drain reservoir connected to the sample supply reservoir by one or more microchannel segments;

an elution buffer reservoir;

an analyte waste reservoir; and

a separation channel connecting the elution buffer reservoir and the analyte waste reservoir and intersecting and being in fluid communication with said one or more microchannel segments, the separation channel having a detection region; and

(ii) an analytical device having a detector with a field, the analytical device for moving the flexible elongate laminate from a supply roll to a take-up roll and for bringing the detection region of each of said microstructures within the field of a detector.

65. (Previously presented) The microstructure device of claim 64 wherein said plurality of said microstructures comprises an array of microchannel structures.

66. (Previously presented) The microstructure device of claim 65 wherein said microstructures of said array are arranged in a 12 x 8 orthogonal arrangement or in a 24 x 16 orthogonal arrangement.

67. (Previously presented) The microstructure device of claim 65 wherein said first lamina, said second lamina, and said flexible circuit laminate are plastic.

68. (Amended) A microstructure device for detecting one or more analytes produced in a plurality of assays, the microstructure device comprising (i) a flexible elongate laminate having an array of microchannel structures arranged therein, the flexible elongate laminate comprising a first lamina having a first surface and a second lamina having a second surface, wherein at least one of the first or second lamina has a plurality of openings so that whenever the first surface of the first lamina apposes the second surface of the second lamina each opening of the plurality of openings is in fluid communication with one of said plurality of microstructures, each of said microstructures comprising:

a sample supply reservoir at an opening;

a sample drain reservoir connected to the sample supply reservoir by one or more microchannel segments;

an elution buffer reservoir;

an analyte waste reservoir;

a separation channel having a detection region and connecting the elution buffer reservoir and the analyte waste reservoir and intersecting and being in fluid communication with said one or more microchannel segments; and

a plurality of electrodes connected to conductive traces to generate an electric field between the sample supply reservoir and the sample drain reservoir when an electroflow medium is present in the one or more microchannel segments and to generate an electrical field between the elution buffer revervoir and the analyte waste reservoir when an electroflow medium is present in the separation channel; and

(ii) an analytical device having a detector with a field, the analytical device for moving the flexible elongate laminate from a supply roll to a take-up roll and for bringing the detection region of each of said microstructures within the field of a detector.

69. (New) The microstructure device of claim 68 wherein said plurality of said microstructures comprises an array of microchannel structures.

70. (New) The microstructure device of claim 69 wherein said microstructures of said array are arranged in a 12 x 8 orthogonal arrangement or in a 24 x 16 orthogonal arrangement.

71. (New) The microstructure device of claim 69 wherein said first lamina and said second lamina are plastic.